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(4) The highway motorcycle must have the vehicle emission control information we require under 40 CFR part 1051.

(5) You must add a permanent supplemental label to the highway motorcycle in a position where it will remain clearly visible. In the supplemental label, do the following:

(i) Include the heading: "HIGHWAY MOTORCYCLE ENGINE EMISSION CONTROL INFORMATION".

(ii) Include your full corporate name and trademark. You may instead include the full corporate name and trademark of another company you choose to designate.

(iii) State: "THIS VEHICLE WAS ADAPTED FOR HIGHWAY USE WITHOUT AFFECTING ITS EMISSION CONTROLS."

(iv) State the date you finished modifying the vehicle (month and year), if applicable.

(6) Send the Designated Compliance Officer a signed letter by the end of each calendar year (or less often if we tell you) with all the following information:

(i) Identify your full corporate name, address, and telephone number.

(ii) List the highway motorcycle models you expect to produce under this exemption in the coming year.

(iii) State: "We produced each listed highway motorcycle without making any changes that could increase its certified emission levels, as described in 40 CFR 86.448-2006."

(e) *Failure to comply.* If your highway motorcycles do not meet the criteria listed in paragraph (d) of this section, they will be subject to the standards, requirements, and prohibitions of this part 86 and 40 CFR part 85, and the certificate issued under 40 CFR part 1051 will not be deemed to also be a certificate issued under this part 86. Intro-

ducing these motorcycles into commerce without a valid exemption or certificate of conformity under this part violates the prohibitions in 40 CFR part 85.

(f) *Data submission.* We may require you to send us emission test data on the duty cycle for Class I motorcycles.

(g) *Participation in averaging, banking and trading.* Recreational vehicles adapted for use as highway motorcycles under this section may not generate or use emission credits under this part 86. These engines may generate credits under the ABT provisions in 40 CFR part 1051. These engines must use emission credits under 40 CFR part 1051 if they are certified to an FEL that exceeds an applicable standard.

[70 FR 40436, July 13, 2005]

§ 86.449 Averaging provisions.

(a) This section describes how and when averaging may be used to show compliance with applicable HC+NO_x emission standards. Emission credits may not be banked for use in later model years, except as specified in paragraph (j) of this section.

(1) Compliance with the Class I and Class II HC+NO_x standards set forth in § 86.410-2006 (f) may be demonstrated using the averaging provisions of this section. To do this you must show that your average emission levels are at or below the applicable standards in § 86.410-2006.

(2) Compliance with the Class III HC+NO_x standards set forth in § 86.410-2006 (a)(2) may be demonstrated using the averaging provisions of this section. To do this you must show that your average emission levels are at or below the applicable standards in § 86.410-2006.

(3) Family emission limits (FELs) may not exceed the following caps:

Class	Tier	Model year	FEL cap (g/km)
			HC+NO _x
Class I or II	Tier 1	2006 and later	5.0
Class III	Tier 1	2006-2009	5.0
	Tier 2	2010 and later	2.5

(b) Do not include any exported vehicles in the certification averaging program. Include only motorcycles certified under this subpart and intended for sale in the United States.

(c) To use the averaging program, do the following things:

(1) Certify each vehicle to a family emission limit.

(2) Calculate a preliminary average emission level according to paragraph (d) of this section using projected production volumes for your application for certification.

(3) After the end of your model year, calculate a final average emission level

according to paragraph (d) of this section for each averaging set for which you manufacture or import motorcycles.

(d) Calculate your average emission level for each averaging set for each model year according to the following equation and round it to the nearest tenth of a g/km. Use consistent units throughout the calculation. The averaging sets are defined in paragraph (k) of this section.

(1) Calculate the average emission level as:

$$\text{Emission level} = \left[\sum_i (\text{FEL})_i \times (\text{UL})_i \times (\text{Production})_i \right] / \left[\sum_i (\text{Production})_i \times (\text{UL})_i \right]$$

Where:

FEL_i = The FEL to which the engine family is certified.

UL_i = The useful life of the engine family.

Production_i = The number of vehicles in the engine family.

(2) Use production projections for initial certification, and actual production volumes to determine compliance at the end of the model year.

(e)(1) Maintain and keep five types of properly organized and indexed records for each group and for each emission family:

(i) Model year and EPA emission family.

(ii) FEL.

(iii) Useful life.

(iv) Projected production volume for the model year.

(v) Actual production volume for the model year.

(2) Keep paper records of this information for three years from the due date for the end-of-year report. You may use any additional storage formats or media if you like.

(3) Follow paragraphs (f) through (i) of this section to send us the information you must keep.

(4) We may ask you to keep or send other information necessary to implement this subpart.

(f) Include the following information in your application for certification:

(1) A statement that, to the best of your belief, you will not have a negative credit balance for any motorcycle when all credits are calculated. This means that if you believe that your average emission level will be above the standard (i.e., that you will have a deficit for the model year), you must have banked credits pursuant to paragraph (j) of this section to offset the deficit.

(2) Detailed calculations of projected emission credits (zero, positive, or negative) based on production projections. If you project a credit deficit, state the source of credits needed to offset the credit deficit.

(g) At the end of each model year, send an end-of-year report.

(1) Make sure your report includes the following things:

(i) Calculate in detail your average emission level and any emission credits based on actual production volumes.

(ii) If your average emission level is above the allowable average standard, state the source of credits needed to offset the credit deficit.

(2) Base your production volumes on the point of first retail sale. This point is called the final product-purchase location.

(3) Send end-of-year reports to the Designated Compliance Officer within 120 days of the end of the model year.

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If you send reports later, EPA may void your certificate ab initio.

(4) If you generate credits for banking pursuant to paragraph (j) of this section and you do not send your end-of-year reports within 120 days after the end of the model year, you may not

use the credits until we receive and review your reports. You may not use projected credits pending our review.

(5) You may correct errors discovered in your end-of-year report, including errors in calculating credits according to the following table:

If . . .	And if . . .	Then we . . .
(i) Our review discovers an error in your end-of-year report that increases your credit balance.	The discovery occurs within 180 days of receipt.	Restore the credits for your use.
(ii) You discover an error in your report that increases your credit balance.	The discovery occurs within 180 days of receipt.	Restore the credits for your use.
(iii) We or you discover an error in your report that increases your credit balance.	The discovery occurs more than 180 days after receipt.	Do not restore the credits for your use.
(iv) We discover an error in your report that reduces your credit balance.	At any time after receipt	Reduce your credit balance.

(h) Include in each report a statement certifying the accuracy and authenticity of its contents.

(i) We may void a certificate of conformity for any emission family if you do not keep the records this section requires or give us the information when we ask for it.

(j) You may include Class III motorcycles that you certify with HC+NO_x emissions below 0.8 g/km in the following optional early banking program:

(1) To include a Class III motorcycle in the early banking program, assign it

an emission rate of 0.8 g/km when calculating your average emission level for compliance with the Tier 1 standards.

(2)(i) Calculate bankable credits from the following equation:

Bonus credit = Y × [(0.8 g/km – Certified emission level)] × [(Production volume of engine family) × (Useful life)]

(ii) The value of Y is defined by the model year and emission level, as shown in the following table:

Model year	Multiplier (Y) for use in MY 2010 or later corporate averaging	
	If your certified emission level is less than 0.8 g/km, but greater than 0.4 g/km, then Y =	If your certified emission level is less than 0.4 g/km, then Y =
2003 through 2006	1.500	3.000
2007	1.375	2.500
2008	1.250	2.000
2009	1.125	1.500

(3) Credits banked under this paragraph (j) may be use for compliance with any 2010 or later model year standards as follows:

(i) If your average emission level is above the average standard, calculate your credit deficit according to the following equation, rounding to the nearest tenth of a gram:

Deficit = (Emission Level – Average Standard) × (Total Annual Production) × (Useful Life)

(ii) Credit deficits may be offset using banked credits.

(k) Credits may not be exchanged across averaging sets except as explicitly allowed by this paragraph (k).

(1) There are two averaging sets:

(i) Class I and Class II motorcycles certified to HC+NO_x standards.

(ii) Class III motorcycles.

(2) Where a manufacturer's average HC+NO_x emission level for Class III motorcycles (as calculated under paragraph (d)(1) of this section) is below the

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applicable standard, the manufacturer may generate credits that may be used show compliance with HC+NO_x standards for Class I and Class II motorcycles during the same model year. Use the following equations to calculate credits and credit deficits for each class or subclass:

Credit = (Average Standard - Emission Level) × (Total Annual Production) × (Useful Life)

Deficit = (Emission Level - Average Standard) × (Total Annual Production) × (Useful Life)

(1) Manufacturers participating in the averaging program of this section may modify FELs during the model year as specified in this paragraph (1).

(1) Upon notifying EPA, manufacturers may raise the FEL for an engine family and begin labeling motorcycles with the new FEL.

(2) Manufacturers may ask to lower FELs based on test data of production vehicles showing that the motorcycles in the engine family have emissions below the new FEL. Manufacturers must test the motorcycles according to 40 CFR part 1051, subpart D. Manufacturers may not begin labeling motorcycles with the new FEL until they have received EPA approval to do so.

(3) Manufacturers may not change the FEL of any motorcycle that has been placed into service or that is no longer in their possession.

[69 FR 2439, Jan. 15, 2004]

Subpart F—Emission Regulations for 1978 and Later New Motorcycles; Test Procedures

SOURCE: 42 FR 1137, Jan. 5, 1977, unless otherwise noted.

§ 86.501-78 Applicability.

(a) This subpart contains the motorcycle test procedures specified in subpart E.

(b) Provisions of this subpart apply to tests performed by both the Administrator and motor vehicle manufacturers.

§ 86.502-78 Definitions.

(a) The definitions in § 86.402-78 apply to this subpart.

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(b) [Reserved]

§ 86.503-78 Abbreviations.

(a) The abbreviations in § 86.403-78 apply to this subpart.

(b) [Reserved]

§ 86.504-78 Section numbering.

(a) The section numbering system described in § 86.404-78 is used in this subpart.

(b) [Reserved]

§ 86.505-78 Introduction; structure of subpart.

(a) This subpart describes the equipment required and the procedures to follow in order to perform exhaust emission tests on motorcycles. Subpart E sets forth the testing requirements and test intervals necessary to comply with EPA certification procedures.

(b) Three topics are addressed in this subpart. Sections 86.508 through 86.515 set forth specifications and equipment requirements; §§ 86.516 through 86.526 discuss calibration methods and frequency; test procedures and data requirements are listed (in approximate order of performance) in §§ 86.527 through 86.544.

§ 86.505-2004 Introduction; structure of subpart.

(a) This subpart describes the equipment required and the procedures to follow in order to perform exhaust emission tests on motorcycles. Subpart E sets forth the testing requirements and test intervals necessary to comply with EPA certification procedures. Alternate equipment, procedures, and calculation methods may be used if shown to yield equivalent or superior results, and if approved in advance by the Administrator.

(b) Three topics are addressed in this subpart. Sections 86.508 through 86.515 set forth specifications and equipment requirements; §§ 86.516 through 86.526 discuss calibration methods and frequency; test procedures and data requirements are listed (in approximate order of performance) in §§ 86.527 through 86.544.

(c) For diesel-fueled motorcycles, use the sampling and analytical procedures and the test fuel described in subpart B of this part for diesel-fueled light-duty